



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/795,929

03/08/2004

Leo M. Pedlow JR.

SNY-T5718.02

1819

24337 7590 06/30/2008  
MILLER PATENT SERVICES  
2500 DOCKERY LANE  
RALEIGH, NC 27606

EXAMINER

JOHNSON, CARLTON

ART UNIT

PAPER NUMBER

2136

MAIL DATE

DELIVERY MODE

06/30/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/795,929	<b>Applicant(s)</b> PEDLOW ET AL.	
	<b>Examiner</b> CARLTON V. JOHNSON	<b>Art Unit</b> 2136	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 March 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-57 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-57 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3-14-2008</u> .   | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This action is responding to application papers filed on **3-8-2004**.
2. Claims **1 - 57** are pending. Claims **1, 6, 7, 9, 13, 14, 16, 17, 23, 24, 29, 30, 35, 36, 41, 44, 45, 46, 47, 51, 52, 53** have been amended. Claims **1, 9, 16, 23, 29, 35, 41, 47, 52** are independent.

### ***Response to Arguments***

3. Applicant's arguments filed 3/14/2008 have been fully considered but they are not persuasive.

3.1 Applicant argues that the referenced prior art does not disclose, "to encrypt certain audio/video content upon a communications failure between the conditional access encryption system and the conditional access management system". (see Remarks Page 21)

Maillard prior art discloses the conditional access system as stipulated by applicant. (see Maillard col. 6, lines 36-42: conditional access system (conditional access management system)) Bestler prior art discloses a default set of encryption keys used in the event of communications failure. (see Bestler col. 2, lines 54-56: default encryption key) And, Bestler prior art discloses that audio/video content (program content) and not only control information is encrypted using the default encryption keys (session key 1 and key 2). (see Bestler col. 5, lines 32-35: if authorized

for program defined by accompanying program tag, enable to operate their unscramble apparatus to unscramble (decrypt) the program (unscramble the content))

3.2 Applicant argues that the referenced prior art does not disclose, a communication failure. (see Remarks Page 21-22)

Bestler prior art discloses that after being successfully polled, the head-end downloads a new session key to the corresponding subscriber terminal. If the terminal cannot be polled or communications established, then a communications failure has occurred. (see Bestler col. 5, lines 14-19: if the subscriber terminal cannot be polled, then a communications failure has occurred and the subscriber terminal cannot receive the new session key) Bestler prior art discloses that the previous session key ("default key") can be used to decrypt program content (for a limited time period) in the event of a communications failure or unsuccessful polling effort. In applicant's

3.3 After an additional analysis of the applicant's invention, remarks, and a search of the available prior art, it was determined that the current set of prior art consisting of Maillard (6,466,671) and Bestler (4,995,080) discloses the applicant's invention.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims **41, 47, 52** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There is no disclosure of odd decryption keys or even decryption keys. The specification on page 5 mentions an odd and even decrypt engine. That is the extent of the usage of the terms, "odd" and "even", in the specification and the original claims. Appropriate correction required.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims **1 - 57** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Maillard et al.** (US Patent No. **6,466,671**) in view of **Bestler et al.** (US Patent No. **4,995,080**).

**Regarding Claim 1**, Maillard discloses an apparatus for default encryption of content for distribution, comprising:

a) a conditional access encryption system; (see Maillard col. 6, lines 18-22; col. 6,

lines 36-42: access system for management of cable functions, conditional access (CA) module (conditional access system))

- b) a conditional access management system that communicates with and manages the conditional access encryption system; (see Maillard col. 6, lines 36-42: conditional access system (conditional access management system)) and

Maillard discloses wherein a memory storing default encryption information for use by the conditional access system to encrypt certain content. (see Maillard col. 1, lines 33-34; col. 6, lines 59-62: memory for encryption keys storage) Maillard does not specifically disclose whereby encrypt certain content upon a communication failure between the conditional access system and the conditional access management system.

However, Bestler discloses wherein:

- c) default encryption information for use by the conditional access encryption system to encrypt certain audio/video content upon a communication failure between the conditional access system and the conditional access encryption management system. (see Bestler col. 3, lines 1-6; col. 5, lines 19-22; col. 5, lines 37-39; col. 5, lines 60-63: encryption information (default) utilized for decryption during communications failure)

It would have been obvious to one of ordinary skill in the art to modify Maillard to enable the capability for usage by the conditional access system to encrypt certain content upon a communication failure between the conditional access system and the conditional access management system as taught by Bestler. One

of ordinary skill in the art would have been motivated to employ the teachings of Bestler in order to enable the capability for a novel and improved method to operate a pay television (cable system) and permit a subscriber to self-authorize his equipment to unscramble pay per view programs. (see Bestler col. 1, lines 28-32: “  
*... This invention relates generally to a novel method of operating a pay television system and particularly to an improved method of operating a pay television system that permits a subscriber to self-authorize his terminal to unscramble special pay per view television programs. ...*”)

**Regarding Claims 2, 10, 18, 25, 31, 37**, Maillard discloses the apparatus of claims 1, 9, 16, 23, 29, 35, wherein the default encryption information comprises default encryption keys. (see Maillard col. 1, lines 33-37; col. 6, lines 59-62; col. 6, lines 55-58: encryption information (keys) for content encryption, stored)

**Regarding Claims 3, 11, 19, 26, 32, 38**, Maillard discloses the apparatus of claims 2, 10, 18, 25, 31, 37, wherein the default encryption keys are unique for each of a plurality of channels. (see Maillard col. 1, lines 64 - col. 2, line 1; col. 4, lines 49-54: encryption key unique for each channel)

**Regarding Claim 4**, Maillard discloses the apparatus of claim 1, further comprising a control computer that initializes the configuration memory with the default encryption information. (see Maillard col. 1, lines 33-37; col. 6, lines 59-62; col. 1, line 61 - col. 2,

line 1: memory, setup configuration information (encryption information))

**Regarding Claims 5, 12, 20, 27, 33, 39**, Maillard discloses the apparatus of claims 1, 9, 16, 23, 29, 35, wherein the configuration memory comprises a non-volatile memory. (see Maillard col. 1, lines 33-37; col. 6, lines 59-62: non-volatile memory utilized for operational (configuration) information)

**Regarding Claims 6, 13**, Maillard discloses the apparatus of claims 1, 9, wherein the content is encrypted with the encryption information. (see Maillard col. 6, lines 45-49; col. 7, lines 46-49; col. 6, lines 55-58: content encrypted, pre-setup configuration information (encryption keys)) Maillard does not specifically disclose whereby if a communication failure occurs between the conditional access management system and the conditional access system. However, Bestler discloses wherein, content is encrypted with the default encryption information if a communication failure occurs between the conditional access encryption management system and the conditional access system. (see Bestler col. 3, lines 1-6; col. 5, lines 19-22; col. 5, lines 37-39; col. 5, lines 60-63: encryption information (default) utilized for decryption during communications failure)

It would have been obvious to one of ordinary skill in the art to modify Maillard to enable the capability for encryption with the default encryption information if a communication failure occurs as taught by Bestler. One of ordinary skill in the art would have been motivated to employ the teachings of Bestler in order to enable the



Art Unit: 2136

capability for a novel and improved method to operate a pay television (cable system) and permit a subscriber to self-authorize his equipment to unscramble pay per view programs. (see Bestler col. 1, lines 28-32)

**Regarding Claims 7, 14**, Maillard discloses the apparatus of claims 1, 9, wherein the content is encrypted with the default encryption information. (see Maillard col. 6, lines 45-49; col. 7, lines 46-49; col. 6, lines 55-58: encryption of content utilizing encryption keys) Maillard does not specifically disclose whereby if communication cannot be established between the conditional access management system and the conditional access system. However, Bestler discloses wherein content is encrypted with the default encryption information, if communication cannot be established between the conditional access management system and the conditional access encryption system. (see Bestler col. 3, lines 1-6; col. 5, lines 19-22; col. 5, lines 37-39; col. 5, lines 60-63: encryption information (default) utilized for decryption during communications failure)

It would have been obvious to one of ordinary skill in the art to modify Maillard to enable the capability for encryption with the default encryption information if communication cannot be established as taught by Bestler. One of ordinary skill in the art would have been motivated to employ the teachings of Bestler in order to enable the capability for a novel and improved method to operate a pay television (cable system) and permit a subscriber to self-authorize his equipment to unscramble pay per view programs. (see Bestler col. 1, lines 28-32)

Art Unit: 2136

**Regarding Claims 8, 15, 21**, Maillard discloses the apparatus according to claims 1, 9, 16, wherein the conditional access system provides selective encryption of the content. (see Maillard col. 6, lines 45-49; col. 7, lines 46-49; col. 6, lines 55-58: selective encryption (encryption of partial content))

**Regarding Claim 9**, Maillard discloses an apparatus for default encryption, comprising:

- a) a conditional access system; (see Maillard col. 6, lines 18-22; col. 6, lines 36-42: access system for management of cable functions, conditional access (CA) module (conditional access system))
- b) means for encrypting content in the conditional access system; (see Maillard col. 7, lines 54-58; col. 7, line 66 - col. 8, line 4: content (encrypted) distributed over communications medium; col. 6, lines 59-65; col. 9, lines 27-31; col. 25, lines 37-39: software implementation, means; col. 7, lines 5-15: scramble (encrypt) content))
- c) means for managing the conditional access system; (see Maillard col. 6, lines 36-42: conditional access system (conditional access management system); col. 6, lines 59-65; col. 9, lines 27-31; col. 25, lines 37-39: software implementation, means)
- d) means for communicating between the managing means and the encrypting means; (see Maillard col. 10, lines 10-16; col. 12, lines 36-45: command processing, conditional access system; col. 6, lines 59-65; col. 9, lines 27-31; col. 25, lines 37-39: software implementation, means)

- f) means for configuring the storing means with the default encryption information.  
(see Maillard col. 1, line 61 - col. 2, line 1: configure encryption information; col. 6, lines 59-65; col. 9, lines 27-31; col. 25, lines 37-39: software implementation, means)

Maillard discloses wherein means for storing default encryption information for the conditional access system for use by the conditional access system to encrypt certain audio/video content. (see Maillard col. 1, lines 33-34; col. 1, line 61 - col. 2, line 1: storage configuration (encryption) information; col. 4, lines 28-29: receive and decrypt video and/or audio signals; col. 7, lines 5-15: scramble (encrypt) content))

Maillard does not specifically disclose whereby a communication failure between the conditional access system and the conditional access management system.

However, Bestler discloses wherein:

- e) a communication failure between the conditional access system and the managing means; (see Bestler col. 3, lines 1-6; col. 5, lines 19-22; col. 5, lines 37-39; col. 5, lines 60-63: encryption information (default) utilized for decryption during communications failure)

It would have been obvious to one of ordinary skill in the art to modify Maillard to enable the capability for encryption with the default encryption information if communication cannot be established as taught by Bestler. One of ordinary skill in the art would have been motivated to employ the teachings of Bestler in order to enable the capability for a novel and improved method to operate a pay television (cable system) and permit a subscriber to self-authorize his equipment to

unscramble pay per view programs. (see Bestler col. 1, lines 28-32)

**Regarding Claim 16**, Maillard discloses a method of default encryption of audio/video content for distribution, comprising:

- a) initializing a default configuration memory with default encryption information;  
(see Maillard col. 1, lines 33-34; col. 6, lines 59-62: memory; col. 1, line 61 - col. 2, line 1: initialize memory; col. 23, lines 8-14: transfer (initialize) with configuration (encryption) information)
- b) communicating with a conditional access management system to retrieve active encryption information for a conditional access system; (see Maillard col. 23, lines 8-14: receive (transfer) encryption keys, normal operation)
- c) encrypting content for distribution with the active encryption information;  
distributing the content encrypted with active encryption information; (see Maillard col. 6, lines 45-49; col. 7, lines 46-49: content encrypted with encryption keys)
- e) distributing the audio/video content encrypted with the default encryption information. (see Maillard col. 7, lines 54-58; col. 7, line 66 - col. 8, line 4: content (encrypted) distributed over communications medium; col. 4, lines 28-29: receive and decrypt (distribute) video and/or audio signals)
- f) encrypting the audio/video content with the default encryption information;  
(see Maillard col. 6, lines 45-49; col. 7, lines 46-49: encrypt content utilizing encryption keys; col. 7, lines 5-15: scramble (encrypt) content))

Maillard does not specifically disclose if a communication failure occurs between the conditional access management system and the conditional access system.

However, Bestler discloses wherein:

if a communication failure occurs between the conditional access management system and the conditional access system:

- d) reading the default encryption information from the default configuration memory; (see Bestler col. 3, lines 1-6; col. 5, lines 19-22; col. 5, lines 37-39; col. 5, lines 60-63: encryption information (default) utilized for decryption during communications failure)

It would have been obvious to one of ordinary skill in the art to modify Maillard to enable the capability for reading the default encryption information if communication cannot be established as taught by Bestler. One of ordinary skill in the art would have been motivated to employ the teachings of Bestler in order to enable the capability for a novel and improved method to operate a pay television (cable system) and permit a subscriber to self-authorize his equipment to unscramble pay per view programs. (see Bestler col. 1, lines 28-32)

**Regarding Claim 17**, Maillard discloses the method of claim 16, further comprising:

if communication is restored between the conditional access management system and the conditional access system:

- a) communicating with the conditional access management system to retrieve active encryption information for the conditional access system; (see Maillard

col. 23, lines 8-14: retrieve configuration (encryption) information, normal operation)

- b) encrypting the audio/video content for distribution with the active encryption information; (see Maillard col. 6, lines 45-49; col. 7, lines 46-49: encrypt content utilizing encryption information; col. 4, lines 28-29: receive and decrypt video and/or audio signals) and
- c) distributing the audio/video content encrypted with active encryption information. (see Maillard col. 7, lines 54-58; col. 7, line 66 - col. 8, line 4: content (encrypted) distributed over communications medium)

**Regarding Claims 22, 28, 34, 40**, Maillard discloses a computer readable medium storing instructions which, when executed on a programmed processor, carry out the process according to claims 16, 23, 29, 35. (see Maillard col. 6, lines 59-65; col. 9, lines 27-31; col. 25, lines 37-39: software implementation)

**Regarding Claim 23**, Maillard discloses a method of default encryption of content for distribution, comprising:

- a) initializing a default configuration memory with default encryption information; (see Maillard col. 1, lines 33-34; col. 6, lines 59-62: memory; col. 1, line 61 - col. 2, line 1: initialize memory; col. 23, lines 8-14: transfer (initialize) with configuration (encryption) information)
- b) attempting to communicate with a conditional access management system to

retrieve active encryption information for a conditional access system; (see Maillard col. 10, lines 10-16; col. 12, lines 36-45: command processing, conditional access system)

- e) encrypting the audio/video content with the default encryption information; (see Maillard col. 6, lines 45-49; col. 7, lines 46-49; col. 6, lines 55-58: encrypt content with encryption keys; col. 4, lines 28-29: receive and decrypt video and/or audio signals; col. 7, lines 5-15: scramble (encrypt) content)) and
- f) distributing the audio/video content encrypted with the default encryption information. (see Maillard col. 7, lines 54-58; col. 7, line 66 - col. 8, line 4: content (encrypted) distributed over communications medium)

Maillard does not specifically disclose whereby if communication cannot be established between the conditional access management system and the conditional access system.

However, Bestler discloses wherein:

if communication cannot be established between the conditional access management system and the conditional access system:

- d) reading the default encryption information from the default configuration memory; (see Bestler col. 3, lines 1-6; col. 5, lines 19-22; col. 5, lines 37-39; col. 5, lines 60-63: encryption information (default) utilized for decryption during communications failure)

It would have been obvious to one of ordinary skill in the art to modify

Maillard to enable the capability for reading the default encryption information if communication cannot be established as taught by Bestler. One of ordinary skill in the art would have been motivated to employ the teachings of Bestler in order to enable the capability for a novel and improved method to operate a pay television (cable system) and permit a subscriber to self-authorize his equipment to unscramble pay per view programs. (see Bestler col. 1, lines 28-32)

**Regarding Claim 24**, Maillard discloses the method of claim 23, further comprising:

if communication is achieved between the conditional access management system and the conditional access system:

- b) receiving active encryption information for the audio/video content for distribution in the conditional access system; (see Maillard col. 23, lines 8-14;: receive (transfer) encryption keys, normal operation; col. 4, lines 28-29: receive and decrypt video and/or audio signals)
- c) encrypting the content with the active encryption information; (see Maillard col. 6, lines 45-49; col. 7, lines 46-49; col. 6, lines 55-58: content encrypted with encryption keys) and
- d) distributing the content encrypted with active encryption information. (see Maillard (see Maillard col. 7, lines 54-58; col. 7, line 66 - col. 8, line 4: content (encrypted) distributed over communications medium)

**Regarding Claims 29, 35**, Maillard discloses a method of default encryption of



audio/video content for distribution, comprising:

- a) initializing a default configuration memory with default encryption information;  
(see Maillard col. 1, lines 33-34; col. 6, lines 59-62; col. 1, line 61 - col. 2, line 1:  
configuration (encryption) information stored in memory; col. 4, lines 28-29:  
receive and decrypt video and/or audio signals)
- b) communicating with a conditional access management system to retrieve active  
encryption information for the content for distribution in a conditional access  
system; (see Maillard col. 23, lines 8-14: transfer configuration (encryption)  
information)
- c) encrypting the audio/video content with the active encryption information;  
distributing the audio/video content encrypted with active encryption information;  
(see Maillard col. 6, lines 45-49; col. 7, lines 46-49; col. 6, lines 55-58: content  
(encrypted) and distributed; col. 7, lines 5-15: scramble (encrypt) content))
- d) signaling all set-top boxes within the conditional access system instructing them  
to use the active encryption information; (see Maillard col. 10, lines 10-16; col.  
12, lines 36-45: command process, conditional access system; encryption keys  
sent to set top box)
- f) encrypting the audio/video content with the default encryption information;  
(see Maillard col. 6, lines 45-49; col. 7, lines 46-49; col. 6, lines 55-58: content  
encrypted with default encryption keys)
- g) signaling all set-top boxes within the conditional access system instructing  
them to use the default encryption information; (see Maillard col. 10, lines 10-

16; col. 12, lines 36-45: command processing, conditional access system; col. 15, line 63 - col. 16, line 3: no communications for some set-top boxes, still connected set top boxes configure using encryption keys) and

h) distributing the audio/video content encrypted with the default encryption information. (see Maillard col. 7, lines 54-58; col. 7, line 66 - col. 8, line 4: distributed content for usage by both connected set-top boxes and disconnected set-top boxes)

Maillard does not specifically disclose whereby if a communication failure occurs between the conditional access management system and the conditional access system.

However, Bestler discloses wherein:

if a communication failure occurs between the conditional access management system and the conditional access system:

e) reading the default encryption information from the default configuration memory; (see Bestler col. 3, lines 1-6; col. 5, lines 19-22; col. 5, lines 37-39; col. 5, lines 60-63: encryption information (default) utilized for decryption during communications failure)

It would have been obvious to one of ordinary skill in the art to modify Maillard to enable the capability for reading the default encryption information if communication cannot be established as taught by Bestler. One of ordinary skill in the art would have been motivated to employ the teachings of Bestler in order to enable the capability for a novel and improved method to operate a pay

television (cable system) and permit a subscriber to self-authorize his equipment to unscramble pay per view programs. (see Bestler col. 1, lines 28-32)

**Regarding Claims 30, 36,** Maillard discloses the method of claims 29, 35, further comprising:

if communication is restored/achieved between the conditional access management system and the conditional access system:

- a) receiving active encryption information for the audio/video content for distribution in the conditional access system; (see Maillard col. 7, lines 54-58; col. 7, line 66 - col. 8, line 4: encryption information transferred/received, normal operation)
- b) encrypting the audio/video content with the active encryption information; (see Maillard col. 6, lines 45-49; col. 7, lines 46-49; col. 6, lines 55-58: content encrypted with encryption keys)
- c) signaling all set-top boxes within the conditional access system instructing them to use the active encryption information; (see Maillard col. 10, lines 10-16; col. 12, lines 36-45: command processing by conditional access system; col. 1, line 61 - col. 2, line 1: configure encryption information) and
- d) distributing the audio/video content encrypted with active encryption information. (see Maillard col. 7, lines 54-58; col. 7, line 66 - col. 8, line 4: distribute encrypted content)

**Regarding Claim 41,** Maillard discloses an apparatus for default decryption of

audio/video content, comprising:

- a) a receiver conditional access system that provides decryption functions; (see Maillard col. 6 , lines 18-22; col. 6, lines 36-42: access system for management of cable functions, conditional access (CA) module (conditional access system))
- e) said memory also storing default decryption key for use to decrypt the audio/video content when the conditional access system receives signaling instructing it to use the default decryption key instead of the odd and even decryption keys. (see Maillard col. 10, lines 10-16; col. 12, lines 36-45: command processing, conditional access system; col. 1, lines 33-34; col. 6, lines 59-62: memory, storage configuration information)

Maillard discloses wherein a memory storing decryption keys used by decrypters. (see Maillard col. 1, lines 33-34; col. 6, lines 59-62: memory for encryption keys storage) Maillard does not specifically disclose an even and an odd decryption engine and storing odd and even decryption keys.

However, Bestler discloses:

- b) an even decryption engine; an odd decryption engine; (see Bestler col. 5, lines 32-35: encryption keys alternatively used for encryption (scrambling); two sets of keys used for encryption/decryption; session key 1 and session key 2 for encryption of content (program content))
- c) odd and even decryption keys for use by the an odd and even decrypters; (see Bestler col. 5, lines 32-35: encryption keys alternatively used for encryption (scrambling))

- f) wherein, such signaling instruction is received when a communication failure at an audio/video content provider would otherwise permit content to be provided without benefit of encryption for decryption using the odd or even decryption keys. (see Bestler col. 3, lines 1-6; col. 5, lines 19-22; col. 5, lines 37-39; col. 5, lines 60-63: encryption information (default) utilized for decryption during communications failure)

There is no disclosure of even and odd decryption keys.

It would have been obvious to one of ordinary skill in the art to modify Maillard to enable the capability for usage by the conditional access system to encrypt certain content upon a communication failure between the conditional access system and the conditional access management system as taught by Bestler. One of ordinary skill in the art would have been motivated to employ the teachings of Bestler in order to enable the capability for a novel and improved method to operate a pay television (cable system) and permit a subscriber to self-authorize his equipment to unscramble pay per view programs. (see Bestler col. 1, lines 28-32)

**Regarding Claims 42, 48, 54,** Maillard discloses the apparatus of claims 41, 47, 52, wherein the default decryption information comprises default decryption keys. (see Maillard col. 1, line 61 - col. 2, line 1: encryption/decryption information (keys) for content encryption)

**Regarding Claims 43, 49, 55,** Maillard discloses the apparatus of claims 42, 48, 54,

Art Unit: 2136

wherein the default decryption keys are unique for each of a plurality of channels. (see Maillard col. 1, line 61 - col. 2, line 1; col. 4, lines 49-54: encryption/decryption key unique for each channel)

**Regarding Claim 44**, Maillard discloses the apparatus of claim 41, wherein, when signaled to initialize the default decryption key, the conditional access system initializes the memory with default encryption information received with the signaling. (see Maillard col. 1, line 61 - col. 2, line 1: configuration information processed)

**Regarding Claims 45, 50, 56**, Maillard discloses the apparatus of claims 41, 47, 52, wherein the configuration memory comprises a non-volatile memory. (see Maillard col. 1, lines 33-34; col. 6, lines 59-62: non-volatile memory utilized for operational (configuration) information)

**Regarding Claim 46**, Maillard discloses the apparatus of claim 41, wherein the content is decrypted with the default decryption key upon reception of signaling instructing the conditional access system to use the default decryption key. (see Maillard col. 1, line 61 - col. 2, line 1: communication restored, process configuration (encryption) information)

**Regarding Claim 47**, Maillard discloses an apparatus for default decryption of audio/video content, comprising:

- a) means for receiving audio/video content in a conditional access system that

provides decryption functions; (see Maillard col. 7, lines 54-58; col. 7, line 66 -

col. 8, line 4: received (encrypted) content; col. 6, lines 59-65; col. 9, lines 27-31;

col. 25, lines 37-39: software implementation, means)

d) means for receiving signaling in the conditional access system; (see Maillard col. 6, lines 18-22; col. 6, lines 36-42: conditional access system; col. 10, lines 10-16; col. 12, lines 36-45: command processing; signaling for conditional access system; col. 6, lines 59-65; col. 9, lines 27-31; col. 25, lines 37-39: software implementation, means)

f) means for configuring the storing means with the default decryption information. (see Maillard col. 1, line 61 - col. 2, line 1: configure encryption information; col. 6, lines 59-65; col. 9, lines 27-31; col. 25, lines 37-39: software implementation, means)

Maillard discloses wherein a memory storing decryption keys used by decrypters.

(see Maillard col. 1, lines 33-34; col. 6, lines 59-62: memory for encryption keys

storage) And, Maillard discloses means for storing default decryption information

for audio/video content received in the conditional access system for use to decrypt

the audio/video content when the conditional access system receives signaling

instructing it to use the default decryption information. (see Maillard col. 1, lines 33-

34; col. 6, lines 59-62: storage configuration information in memory; col. 6, lines 59-

65; col. 9, lines 27-31; col. 25, lines 37-39: software implementation, means)

Maillard does not specifically disclose an even and an odd decryption engine and

storing odd and even decryption keys.

However, Bestler discloses:

- b) an even decryption engine; an odd decryption engine; (see Bestler col. 5, lines 32-35: encryption keys alternatively used for encryption (scrambling); two sets of keys used for encryption/decryption; session key 1 and session key 2 for encryption of content (program content))
- c) odd and even decryption keys for use by the an odd and even decrypters; (see Bestler col. 5, lines 32-35: encryption keys alternatively used for encryption (scrambling))
- e) odd and even decryption keys wherein such signaling instruction is received when a communication failure at an audio/video content provider would otherwise permit content to be provided without benefit of encryption for decryption using the odd or even decryption keys; (see Bestler col. 5, lines 32-35: encryption keys alternatively used for encryption (scrambling))

There is no disclosure of even and odd decryption keys.

It would have been obvious to one of ordinary skill in the art to modify Maillard to enable the capability for usage by the conditional access system to encrypt certain content upon a communication failure between the conditional access system and the conditional access management system as taught by Bestler. One of ordinary skill in the art would have been motivated to employ the teachings of Bestler in order to enable the capability for a novel and improved method to operate a pay television (cable system) and permit a subscriber to self-authorize his



equipment to unscramble pay per view programs. (see Bestler col. 1, lines 28-32)

**Regarding Claim 51**, Maillard discloses the apparatus of claim 47, wherein the content is decrypted with the default decryption information upon reception of signaling instructing the conditional access system to use the default decryption information. (see Maillard col. 10, lines 10-16; col. 12, lines 36-45: command processing, conditional access system; col. 1, line 61 - col. 2, line 1: utilize configuration information, encryption keys)

**Regarding Claim 52**, Maillard discloses a method of default decryption of audio/video content, comprising:

- b) receiving signaling instructing storage of default decryption information for audio/video content in a conditional access system; (see Maillard col. 10, lines 10-16; col. 12, lines 36-45: command processing, conditional access system)
- c) receiving default decryption information for use to decrypt the audio/video content when the conditional access system receives signaling instructing it to use the default decryption information; (see Maillard col. 10, lines 10-16; col. 12, lines 36-45: command processing, conditional access system; col. 23, lines 8-14: receive configuration information)
- d) initializing a default configuration memory with the default decryption information; (see Maillard col. 1, lines 33-34; col. 6, lines 59-62; col. 1, line 61 – col. 2, line 1: memory, initialized (storage) configuration information)

- e) receiving active decryption information with audio/video content in the conditional access system; (see Maillard col. 23, lines 8-14: receive configuration information)

if signaling reception instructs use of the default decryption information for the conditional access system:

- g) reading the default decryption information for the audio/video content from the default configuration memory; (see Maillard col. 23, lines 8-14; col. 1, line 61 - col. 2, line 1: configure encryption information, normal operation) and
- h) decrypting audio/video content with the default decryption information. (see Maillard col. 8, lines 17-22: decrypt content)

Maillard discloses decrypting selected channels. (see Maillard col. 8, lines 17-22: decrypt content) Maillard does not specifically disclose

However, Bestler discloses:

- a) receiving audio/video content in a conditional access system that provides decryption functions, said audio/video content normally being decrypted using an even decryption engine and an odd decryption engine operating by use of odd.  
(see Bestler col. 5, lines 32-35: encryption keys alternatively used for encryption (scrambling); two sets of keys used for encryption/decryption; session key 1 and session key 2 for encryption of content (program content))
- f) odd and even decryption engines using the odd and even decryption keys; (see Bestler col. 5, lines 32-35: encryption keys alternatively used for encryption

(scrambling))

- i) wherein, such signaling reception instructs use of the default decryption information when a communication failure at an audio/video content provider would otherwise permit content to be provided without benefit of encryption for decryption using the odd or even decryption keys. (see Bestler col. 3, lines 1-6; col. 5, lines 19-22; col. 5, lines 37-39; col. 5, lines 60-63: encryption information (default) utilized for decryption during communications failure; col. 5, lines 32-35: encryption keys alternatively used for encryption (scrambling))

There is no disclosure of odd and even decryption keys.

It would have been obvious to one of ordinary skill in the art to modify Maillard to enable the capability for usage by the conditional access system to encrypt certain content upon a communication failure between the conditional access system and the conditional access management system as taught by Bestler. One of ordinary skill in the art would have been motivated to employ the teachings of Bestler in order to enable the capability for a novel and improved method to operate a pay television (cable system) and permit a subscriber to self-authorize his equipment to unscramble pay per view programs. (see Bestler col. 1, lines 28-32)

**Regarding Claim 53**, Maillard discloses the method of claim 52, further comprising: if signaling reception instructs use of active decryption information:

- a) receiving active decryption information with the content in the conditional access system; (see Maillard col. 23, lines 8-14: receive configuration information)

- b) decrypting content with the active decryption information. (see Maillard col. 8, lines 17-22: decrypt content)

**Regarding Claim 57**, Maillard discloses a computer readable medium storing instructions which, when executed on a programmed processor, carry out the process according to claim 52. (see Maillard col. 6, lines 59-65; col. 9, lines 27-31; col. 25, lines 37-39: software implementation)

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlton V. Johnson whose telephone number is 571-

Art Unit: 2136

270-1032. The examiner can normally be reached on Monday thru Friday , 8:00 - 5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nasser Moazzami can be reached on 571-272-4195. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nasser G Moazzami/  
Supervisory Patent Examiner, Art Unit 2136

Carlton V. Johnson  
Examiner  
Art Unit 2136

CVJ  
June 9, 2008

